



EDITORIAL

TWAS AND THE HORIZONS OF SCIENCE



▲ Bai Chunli

In July 1985, 250 delegates representing 50 science academies and councils from the developing world gathered in Trieste, Italy, for an occasion that would prove historic: the first meeting of TWAS. “Our major task is – first and foremost – the health of science itself in the South,” Academy founder Abdus Salam told the delegates.

Today, in nations as diverse as India, Brazil, South Africa and China, science is flourishing in ways that could not have been imagined as TWAS was founded. The most recent Nobel Prizes included two remarkable scientists from the developing world: Chinese medical researcher Tu Youyou, whose discovery of anti-malarial drugs artemisinin and dihydroartemisinin has saved millions of lives; and Aziz Sancar, a Turkish-born chemist and TWAS Fellow, whose discoveries in gene-repair have illuminated mechanisms behind cancer and aging.

And yet, science in the developing world today must confront challenges that could scarcely be imagined three decades ago. Climate change, food and water security, health and biodiversity loss – these interconnected challenges are unprecedented.

In this special issue of the TWAS Newsletter, a corps of highly accomplished scientists looks hopefully across the next 30 years to these and other issues. They remind us that TWAS, too, must prepare for the next 30 years. Having learned much from my predecessors as TWAS president, and from the TWAS Council and other Fellows, I see eight critical goals for the Academy:

- **Increase the presence of women.** Even with recent progress, women still number just 10% of our Fellows. To be a global leader, TWAS must increase that ratio and bring more women onto our committees and Council.
- **Increase the number of younger scientists.** While many TWAS Fellows remain productive long past retirement age, younger Fellows can bring valuable new experience and perspective.

- **Expand our geographic presence.** TWAS Fellows represent 94 nations, but in many countries we have few or no members. Electing even one scientist in these countries is a seed for future growth.
- **Expand South-North cooperation.** Given our 2013 name-change to The World Academy of Sciences, we should attach more importance to productive partnerships with developed nations, extending the span of TWAS regional offices and centres of excellence.
- **Shift more responsibility to the five regional offices.** With detailed knowledge of issues, needs and opportunities in their areas, they should play a bigger role in running programmes and activities.
- **Address the gap between emerging and less-developed countries.** Our fellowships are critical. So is intensive training of the kind offered at the five CAS-TWAS Centres of Excellence.
- **Develop a “think-tank” capacity.** With the elite expertise of our Fellows and our experience and credibility at the highest levels, TWAS could expand its role as a global policy adviser.
- **Raise the funds needed to pursue these goals.** Use a creative, energetic approach to fundraising to seek new partners at foundations, in business and among philanthropic organizations.

These goals are certainly ambitious. But like science itself, TWAS must build on the work of leaders who came before us. To be of the greatest value to society, we must constantly grow and evolve. And we must have clear awareness that the priorities we pursue today will do much to determine our impact in the next 30 years.

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